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### Bayesian inductive logic

Romeijn, Johannes Wilhelmus

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## REFERENCES

- ACHINSTEIN, P. (1963) 'Confirmation Theory, Order, and Periodicity', *Philosophy of Science* 30, pp. 17–35.
- ALBERT, M. (1992) 'Bayesian Learning when Chaos looms large', *Economics Letters* 65, pp. 1–7.
- ALBERT, D. Z. (2000) *Time and Chance*, Cambridge (MA): Harvard University Press.
- AKAIKE, H. (1978) 'A Bayesian Analysis of the Minimum AIC Procedure', *Annals of the Institute of Statistical Mathematics* 30, pp. 9–14.
- ARMENDT, B. (1980) 'Is There a Dutch Book Argument for Probability Kinematics?', *Philosophy of Science* 47, pp. 583–588.
- ARMSTRONG, D. (1973) *Belief, Truth and Knowledge*, Cambridge: Cambridge University Press.
- BACCHUS, F., KYBURG JR., H. E. AND THALOS, M. (1990) 'Against Conditionalisation', *Synthese* 85, pp. 475–506.
- BANDYOPADHYAY, P. AND BOIK, R. (1999) 'The Curve Fitting Problem: A Bayesian Rejoinder', *Philosophy of Science* 66, pp. S390–402.
- BARNET, V. (1999) *Comparative Statistical Inference*, New York: John Wiley.
- BENTHEM, J. VAN (2003) 'Conditioning meets Update Logic', *Journal of Logic, Language and Information* 12, pp. 409–421.
- BERGER, J. O. AND WOLPERT, R. L. (1984) *The Likelihood Principle*, Hayward: Institute of Mathematical Statistics.
- BILLINGSLEY, P. (1995) *Probability and Measure*, New York: John Wiley.
- BIRNBAUM, A. (1962) 'On the Foundations of Statistical Inference', *Journal of the American Statistical Association* 57, pp. 269–326.
- BOGDAN, R. (1976) *Local Induction*, Dordrecht: Reidel.
- BOOLOS, G. AND JEFFREY, R. (1974) *Computability and Logic*, Cambridge: Cambridge University Press.
- BOVENS, L. AND HARTMANN, S. (2004) *Bayesian Epistemology*, Oxford: Oxford University Press.
- CARNAP, R. (1950) *The Foundations of Probability*, Chicago: University of Chicago Press.
- CARNAP, R. (1952) *The Continuum of Inductive Methods*, Chicago: University of Chicago Press.

- CARNAP, R. (1980) 'A Basic System of Inductive Logic, Part II', in Jeffrey, R.C. (ed.), *Studies in Inductive Logic and Probability Vol.2*, Berkeley: University of California Press, pp. 7–150.
- CARNAP, R., AND JEFFREY, R. (EDS.) (1971) *Studies in Inductive Logic and Probability*, Vol. 1, Berkeley: University of California Press.
- CARNAP, R., AND STEGMÜLLER, W. (1959) *Inductive Logik und Wahrscheinlichkeit*, Wien: Springer Verlag.
- CARTWRIGHT, N. (1999) *The Dappled World*, Cambridge: Cambridge University Press.
- CHIHARA, M. (1987) 'Some Problems for Bayesian Confirmation Theory', *British Journal for the Philosophy of Science* 38, pp. 551–60.
- CHRISTENSEN, D. (2000) 'Dynamic Coherence versus Epistemic Impartiality', *The Philosophical Review* 109(3), pp. 349–371.
- COHEN, L. J. (191989) *The Philosophy of Induction and Probability*, Oxford: Clarendon Press.
- CORFIELD, D. AND WILLIAMSON, J. (2002) *Foundations of Bayesianism*, Dordrecht: Kluwer Academic Publishers.
- COSTANTINI, D. (1979) 'The Relevance Quotient', *Erkenntnis* 14, pp. 149–57.
- COX, R. T. (1961) *The Algebra of Probable Inference*, Baltimore: John Hopkins University Press.
- CRAMÉR, H. (1946) *Mathematical methods of Statistics*, Princeton: Princeton University Press.
- DAWID, A. P. (1982) "The Well-Calibrated Bayesian", *Journal of the American Statistical Association* 77, pp. 605–613.
- DE FINETTI, B. (1937) 'Foresight: its logical laws, its subjective sources' in *Studies in Subjective Probability*, eds. Kyburg, H. and Smokler, H. (1964), New York: John Wiley, pp. 97–158.
- DE FINETTI, B. (1972) *Probability, Induction and Statistics*, New York: John Wiley.
- DE FINETTI, B. (1974) *Theory of Probability*, New York: John Wiley.
- DIACONIS P. AND FREEDMAN, M. (1980) 'De Finetti's Theorem for Markov Chains', *Annals of Probability* 8, pp. 115–30.
- DIJKSTERHUIS, E. J. (1950) *De Mechanisering van het Wereldbeeld*, Amsterdam: Meulenhof.
- DI MAIO, M. C. (1995) 'Predictive Probability and Analogy by Similarity in Inductive Logic', *Erkenntnis* 43, pp. 369 – 394.
- DOOB, J. L. (1953) *Stochastic Processes*, New York: John Wiley.

- DORLING, J. (1992) 'Bayesian Conditionalisation Resolves Positivist/Realist Disputes', *Journal of Philosophy* 89, pp. 362–382.
- DORR, C. (2002) 'Sleeping Beauty: In Defence of Elga', *Analysis* 62, pp. 292–96.
- DOUVEN, I. (1999) 'Inference to the Best Explanation is Coherent', *Philosophy of Science* 66, pp. S424–36.
- DOUVEN, I. (2004) 'Empirical Equivalence, Explanatory Force, and the Inference to the Best Theory' in A. Aliseda, R. Festa and J. Peijnenburg *Logics of Scientific Cognition: Essays in Debate with Theo Kuipers*, Atlanta: Rodopi, in press.
- DOUVEN, I. (2005) 'Evidence, Explanation, and the Empirical Status of Scientific Realism', *Erkenntnis*, forthcoming.
- DOUVEN, I. AND MEIJS, W. (2005) 'Bootstrap Confirmation Made Quantitative' *Synthese*, forthcoming.
- DUBINS, L. E. (1965) *Inequalities for Stochastic Processes, How to Gamble if You Must*, New York: Dover.
- EARMAN, J. (1992) *Bayes or Bust?*, Cambridge (MA): MIT Press.
- EFRON, B. (1986) 'Why Isn't Everyone a Bayesian', *American Statistician* 40(1), pp. 1–6.
- ELGA, A. (2000) 'Self Locating Belief and the Sleeping Beauty Problem', *Analysis* 60, pp. 143–47.
- FESTA, R. (1993) *Optimum Inductive Methods*, Dordrecht: Kluwer.
- FESTA, R. (1997) 'Analogy and Exchangeability in Predictive Inferences', *Erkenntnis* 45, pp. 89–112.
- FIELD, H. (1978) 'A Note on Jeffrey Conditionalisation', *Philosophy of Science* 45, pp. 361–367.
- FISHER, R. A. (1956) *Statistical Methods and Scientific Inference*, Edinburgh: Oliver and Boyd.
- FITELSON, B. (1999) 'The Plurality of Bayesian Measures of Confirmation and the Problem of Measure Sensitivity', *Philosophy of Science* 66, pp. S362–78.
- FITELSON, B. (2005) 'Inductive Logic', *Philosophy of Science: an Encyclopedia*, Pfeifer, J. and Sarkar, S. (eds.), London: Routledge.
- FRIEDMAN, M. (2004) *The Dynamics of Reason*, Stanford: CSLI Publications.
- GAIFMAN, H. (1986) 'A Theory of Higher Order Probabilities', in Halpern, J. (ed.), *Proceedings of TARK 1986*, San Mateo: Morgan–Kauffman, pp. 275–292.

- GAIFMAN, H. AND SNIR, M. (1982) 'Probabilities over Rich Languages', *Journal of Symbolic Logic* 47, pp. 495–548.
- GÄRDENFORS, P. (1979) 'Forecasts, Decisions and Uncertain Probabilities' *Erkenntnis* 14, pp. 159–181.
- GÄRDENFORS, P. (1988) *Knowledge in Flux*, Boston: MIT Press.
- GÄRDENFORS, P. AND SAHLIN, N. E. (EDS.) (1988) *Decision, Probability, and Utility*, Cambridge: Cambridge University Press.
- GLYMOUR, C. (1980) 'Why I am not a Bayesian' in *Theory and Evidence*, Princeton: Princeton University Press.
- GLYMOUR, C. (1987) *Discovering Causal Structure*, London: Academic Press.
- GILLIES, D. (2000) *Theories of probability*, London: Routledge.
- GILLIES, D. (2001) 'Bayesianism and the Fixity of the Theoretical Framework' in *Foundations of Bayesianism* ed. Corfield, D. and Williamson, J., Dordrecht: Kluwer, pp. 363–379.
- GIERE, R.N. (1988) *Explaining Science*, University of Chicago Press, Chicago.
- GIGERENZER, G. N. AND SELTEN, R. (EDS.) (2001) *Bounded Rationality: the Adaptive Toolbox*, Cambridge (MA): MIT Press.
- GOOD, I. J. (1955) *The Estimation of Probabilities: an Essay on Modern Bayesian Methods*, Cambridge (MA): MIT press.
- GOODMAN, N. (1955) *Fact, Fiction, and Forecast*, Cambridge (MA): Harvard University Press.
- GRAVES, J. (1974) 'Uniformity and Induction', *British Journal for the Philosophy of Science* 24, pp. 301–318.
- HACKING, I. (1965) *The Logical Foundations of Probability*, Cambridge: Cambridge University Press.
- HACKING, I. (1975) *The Emergence of Probability*, Cambridge: Cambridge University Press.
- HARMAN, G. (1986) *Change in View*, Boston: MIT Press.
- HÁJEK, A. (1997) "'Mises Redux"—Redux', *Erkenntnis* 45, pp. 209–27.
- HENKIN, L. ET AL. *Cylindric set algebras and related structures*, Berlin: Springer.
- HINTIKKA, J. (1966) 'A Two-dimensional Continuum of Inductive Methods' in *Aspects of Inductive Logic* ed. Hintikka, J. and Suppes, P., Amsterdam: North Holland.
- HINTIKKA, J. (1970) 'Unknown Probabilities, Bayesianism, and De Finetti's Representation Theorem' in *Boston Studies in the Philosophy of Science*, Vol. VIII, eds. Buck, R. C. and Cohen, R. S., Dordrecht: Reidel.

- HINTIKKA, J. (1997) 'Comment on Theo Kuipers' in *Knowledge and Inquiry*, ed. Sintonen, M., Amsterdam: Rodopi.
- HINTIKKA, J. AND NIINILUOTO, I. (1976) 'An Axiomatic Foundation of the Logic of Inductive Generalisation' in *Formal Methods in the Methodology of the Empirical Sciences*, Przelecki, M., Szaniawski, K. and Wójcicki, R. (eds.), Synthese Library 103, Dordrecht: Kluwer.
- HINTIKKA, J. AND SUPPES, P. (1966) *Aspects of Inductive Logic*, Amsterdam: North Holland.
- HITCHCOCK, C. AND SOBER, E. (2004) 'Prediction versus Accommodation and the Risk of Overfitting' *British Journal for the Philosophy of Science* 55(1), pp. 1–34.
- HOWSON, C. (1973) 'Must the Logical Probability of Laws be Zero?', *British Journal for the Philosophy of Science* 24, pp. 153–82.
- HOWSON, C. AND URBACH, P. (1996) *Scientific Reasoning: the Bayesian Approach*, Chicago: Open Court Publishing Company.
- HOWSON, C. (1997) 'Bayesian Rules of Updating', *Erkenntnis* 45, pp. 195–208.
- HOWSON, C. (1997) 'A Logic of Induction', *Philosophy of Science* 64, pp. 268–90.
- HOWSON, C. (2000) *Hume's Problem*, Oxford: Clarendon Press.
- HUME, D. (1748) *An Enquiry Concerning Human Understanding*, Tom Beauchamp (ed.) (1999), Oxford: Oxford University Press.
- JAYNES, E. T. (1998) *Probability Theory: The Logic of Science*, Cambridge: Cambridge University Press.
- JEFFREY, R. C. (1965) *The Logic of Decision*, Chicago: Chicago University Press.
- JEFFREY, R. C. (1973) 'Carnap's Inductive Logic', *Synthese* 25, pp. 299–306.
- JEFFREY, R. (1977) 'Mises redux' in *Problems in Methodology and Linguistics*, eds. Butts, R.E. and Hintikka, J., Dordrecht: Kluwer Academic Publishers.
- JEFFREY, R. C. (1984) *Probability and the Art of Judgement*, Cambridge: Cambridge University Press.
- JEFFREYS, H. (1931) *Scientific Inference*, Cambridge: Cambridge University Press.
- JEFFREYS, H. (1939) *Theory of Probability*, Oxford: Oxford University Press.
- JOYCE, J. M. (1998) 'A non-pragmatic Vindication of Probabilism', *Philosophy of Science* 65(4), pp. 575–603.

- JOHNSON, W. (1932) 'Probability: the deductive and inductive problems', *Mind* 49, pp. 409–423.
- KAHNEMAN, D., SLOVIC, P. AND TVERSKY A. (EDS.) (1982) *Judgement under Uncertainty*, Cambridge: Cambridge University Press.
- KELLY, K. (1996) *The Logic of Reliable Inquiry*, New York: Oxford University Press.
- KELLY, K. (1991) 'Reichenbach, Induction and Discovery', *Erkenntnis* 35, pp. 123–49.
- KELLY, K. (1997) 'Learning Theory and the Philosophy of Science', *Philosophy of Science* 64, pp. 245–67.
- KELLY, K. (1999) 'Iterated Belief Revision, Reliability, and Inductive Amnesia', *Erkenntnis* 50, pp. 11–58.
- KEMENY, J. (1963) 'Carnap's Theory of Probability and Induction' in *The Philosophy of Rudolph Carnap*, ed. Schilpp, P.A., Illinois: Open Court.
- KEYNES, J.M. (1921) *A Treatise on Probability*, London: MacMillan.
- KIESEPPÄ, I. A. (1997) 'Akaike Information Criterion, Curve Fitting, and the Philosophical Problem of Simplicity', *British Journal for the Philosophy of Science* 48, pp. 21–48.
- KHINCHIN, A. I. (1949) *Mathematical Foundations of Statistical Mechanics*, New York: Dover.
- KOLMOGOROV, A.N. (1933) *Foundations of the Theory of Probability*, translated Morrison, N. (1950), New York: Chelsea Publishing Company.
- KOOI, B. P. (2003) *Knowledge, Chance and Change*, Dissertation University of Groningen.
- KUHN, T. (1962) *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press.
- KUIPERS, T.A.F. (1978) *Studies in Inductive Probability and Rational Expectation*, Dordrecht: Reidel.
- KUIPERS, T.A.F. (1984) 'Two Types of Inductive Analogy by Similarity', *Erkenntnis* 21, pp. 63–87.
- KUIPERS, T.A.F. (1988) 'Inductive Analogy by Similarity and Proximity' in D.H. Helman (ed.) *Analogical Reasoning*, pp. 299–313, Dordrecht: Kluwer.
- KUIPERS, T.A.F. (1997) 'The Carnap–Hintikka Programme in Inductive Logic' in *Knowledge and Inquiry*, ed. Sintonen, M., Rodopi, Amsterdam.
- KUIPERS, T. A. F. (2000) *From Instrumentalism to Constructive Realism*, Dordrecht: Kluwer.

- KULLBACK, S. (1959) *Information Theory and Statistics*, New York: John Wiley.
- KYBURG, H. AND SMOKLER, H. (EDS.) (1964) *Studies in Subjective Probability*, New York: John Wiley.
- KYBURG, H. (1974) *The Logical Foundations of Statistical Inference*, Dordrecht: Reidel.
- LADYMAN, J. (1998) 'What is Structural Realism', *Studies in the History and Philosophy of Science* 29, pp. 409–424.
- LAKATOS, I. (1968) 'Changes in the Problem of Inductive Logic', in *The Problem of Inductive Logic*, Proceedings of the International Colloquium in the Philosophy of Science, Vol. 2, Lakatos, I. (ed.), Amsterdam: North-Holland.
- LAM, W. AND BACCHUS, F. (1994) 'Using New Data to Refine a Bayesian Network' in *Proceedings of the 10th Conference on Uncertainty in Artificial Intelligence*, New York: Morgan Kaufman, pp. 383–90.
- LAMBALGEN, M. VAN (1987) *Random Sequences*, Dissertation University of Amsterdam.
- LAPLACE, P. S. (1951) *A Philosophical Essay on Probabilities*, transl. F.W. Truscott and F. L. Emory, New York: Dover.
- LEWIS, D. (191971) 'Immodest Inductive Methods', *Philosophy of Science* 38, pp. 54–63.
- LEWIS, D. (1980) 'A Subjectivist Guide to Objective Chance' in *Philosophical Papers* Vol. 2 (1986), New York: Oxford University Press, pp. 83–132.
- LEWIS, D. (2001) 'Sleeping Beauty: reply to Elga' in *Analysis* 61, pp. 171–175.
- MAC KAY, D. (2003) *Information Theory, Inference, and Learning Algorithms*, Cambridge: Cambridge University Press.
- MACH, E. (1980) *Natuurkunde, Wetenschap en Filosofie*, transl. W. de Ruiter, Amsterdam: Boom.
- MAHER, P. (1993) *Betting on Theories*, Cambridge: Cambridge University Press.
- MAHER, P. (1993) 'Diachronic Rationality', *Philosophy of Science* 59, pp. 120–141.
- MAHER, P. (2000) 'Probabilities for Two Properties', *Erkenntnis* 52, pp. 63–91.
- MAHER, P. (2001) 'Probabilities for Multiple Properties: the models of Hesse and Carnap and Kemeny', *Erkenntnis* 55, pp. 183–216.
- MAHER, P. (2004) 'Probability Captures the Logic of Scientific Confirmation', preprint.



- MARSDEN, J. E., TROMBA, A. J. (1988) *Vector Calculus*, 3rd Edition, New York: Freeman.
- MAYO, D.G. (1996) *Error and the growth of scientific Knowledge*, Chicago: University of Chicago Press.
- MIKOSH, T. (1998) *Elementary Stochastic Calculus*, London: World Scientific.
- MOOD, F. A. AND GRAYBILL, D. C. B. (1973) *Introduction to the Theory of Statistics*, New York: McGraw-Hill.
- MURDOCH, D. (2002) 'Induction, Hume and Probability', *Journal of Philosophy* 99, pp. 185–99.
- NIINILUOTO, I. (1976) 'Inquiries, Problems, and Questions: Remarks on Local Induction' in *Local Induction*, ed. Bogdan, R., Dordrecht: Reidel.
- NIINILUOTO, I. (1981) 'Analogy and Inductive Logic', *Erkenntnis* 16, pp. 1–34.
- NIINILUOTO, I. 1983 'Novel Facts and Bayesianism', *British Journal for the Philosophy of Science* 34, pp. 375–379.
- NIINILUOTO, I. AND TUOMELA, R. (1973) *Theoretical Concepts and Hypothetico–Deductive Inference*, Dordrecht: Reidel.
- NORTON, J. D. (2003) 'A Material Theory of Induction', *Philosophy of Science* 70, pp. 647–670.
- OKASHA, S. (2001) 'What did Hume Really Show about Induction?', *Philosophical Quarterly* 51, pp. 307–27.
- PAPINEAU, D. (1987) *Reality and Representation*, Oxford: Blackwell.
- PARIS, J. (1994) *The Uncertain Reasoner's Companion*, Cambridge: Cambridge University Press.
- PARIS, J. AND VENCOSKÁ, A. (1997) 'In defence of the Maximum Entropy Inference Process', *International Journal of Automated Reasoning* 17, pp. 77–103.
- PEARL, J. (1988) *Probabilistic Reasoning in Intelligent Systems*, San Mateo: Morgan Kaufman.
- PEIRCE, C. (1934) *Collected Papers Vol. 5*, Harvard University Press, Cambridge (MA).
- POINCARÉ, H. (1952) *Science and Hypothesis*, New York: Dover.
- POLYA, G. (1954) *Patterns of Plausible Inference*, Vol. 2 of *Mathematics and Plausible Reasoning*, Princeton: Princeton University Press.
- POPPER, K. (1959) *The Logic of Scientific Discovery*, London: Hutchinson.
- PRESS, S. J. (1989) *Bayesian Statistics: Principles, Models, and Applications*, New York: Wiley.

- PSILLOS, S. (1995) 'Is Structural Realism the Best of Both Worlds?', *Dialectica* 49, pp. 15–46.
- PUTNAM, H. (1963) 'Degree of Confirmation and inductive logic' in P.A. Schilpp (ed.) *The Philosophy of Rudolf Carnap*, La Salle: Open Court, reprinted in Putnam, H., *Mathematics, Matter and Method*, 1975, Cambridge: Cambridge University Press, pp. 270–92.
- PUTNAM, H. (1963) 'Probability and Confirmation', *The Voice of America* 10, reprinted in *Mathematics, Matter and Method* (1975), Cambridge: Cambridge University Press, pp. 293–304.
- RAMSEY, F. (1926) 'Truth and Probability' in *Studies in Subjective Probability*, eds. Kyburg, H. and Smokler, H. (1964), New York: John Wiley, pp. 23–52.
- REICHENBACH, H. (1948) *The Theory of Probability*, Stanford: University of California Press.
- RÉNYI, A. (1970) *Foundations of Probability*, San Francisco: Holdaen-Day.
- RISSANEN, J. (1982) 'A Universal Prior for Integers and Estimation by Minimal Description Length', *Annals of Statistics* 11, pp. 416–31.
- ROMEYN, J. W. (2004) 'Hypotheses and Inductive Predictions', *Synthese* 141(3), pp. 333–64.
- ROMEYN, J. W. (2005) 'Theory Change and Bayesian Statistical Inference', *Philosophy of Science*, forthcoming.
- ROMEYN, J. W. (2005) 'Analogical Predictions for Explicit Similarity', *Erkenntnis*, forthcoming.
- ROSENKRANTZ, R. (1977) *Inference, Method and Decision*, Dordrecht: Reidel.
- ROSENKRANTZ, R. (1992) 'The Justification of Induction', *Philosophy of Science* 59, pp. 527–39.
- ROTT, H. (1999) 'Coherence and Conservatism in the Dynamics of Belief', *Erkenntnis* 50, pp. 387–412.
- SAHLIN, N. E. (1990) *The Philosophy of F. P. Ramsey*, Cambridge: Cambridge University Press.
- SAHLIN, N. E. (1983) 'On Second-Order Probability and the Notion of Epistemic Risk' in Stigum, B. P. and Wenstrup, F. (eds.) *Foundations of Utility and Risk Theory with Applications*, Dordrecht: Reidel.
- SALMON, W. (1966) *The Foundations of Scientific Inference*, Pittsburgh: Pittsburgh University Press.
- SALMON, W. (1981) 'Rational Prediction', *British Journal for the Philosophy of Science* 32, pp. 115–25.
- SAVAGE, L. J. (1954) *The Foundations of Statistics*, New York: Dover.

- SCHILPP, P. A. (1963) *The Philosophy of Rudolf Carnap*, The Library of Living Philosophers 11, Illinois: Open Court.
- SCOTT, D. AND KRAUS, P. (1966) 'Assigning Probability to Logical Formulas' in *Aspects of Inductive Logic* ed. Hintikka, J. and Suppes, P., Amsterdam: North Holland, pp. 219–64.
- SEIDENFELD, T. AND SCHERVISH, M. J. (1983) 'A Conflict between Finite Additivity and Avoiding Dutch Book', *Philosophy of Science* 50, pp. 398–412.
- SELZ, O. (1913) *Über die Gesetze des geordneten Denkverlaufs*, Stuttgart: W. Spemann.
- SHAFFER, G. (1982) 'Bayes's Two Arguments for the Rule of Conditioning', *Annals of Statistics* 10(4), pp. 1075–89.
- SHORE, J. E. AND JOHNSON, R. W. (1980) 'Axiomatic Derivation of the Principle of Maximum Entropy and the Principle of Minimum Cross-Entropy', *IEEE Transactions on Information Theory*, Vol. 26(1), pp. 26–37.
- SKYRMS, B. (1987) 'Dynamic Coherence and Probability Kinematics', *Philosophy of Science* 54, pp. 1–20.
- SKYRMS, B. (1990) *The Dynamics of Rational Deliberation*, Cambridge (MA): Harvard University Press.
- SKYRMS, B. (1991) 'Carnapian Inductive Logic for Markov Chains', *Erkenntnis* 35, pp. 439–460.
- SKYRMS, B. (1993) 'Analogy by Similarity in Hyper-Carnapian Inductive Logic', in J. Earman, A.I. Janis, G. Massey, and N. Rescher (eds.), *Philosophical Problems of the Internal and External Worlds*, Pittsburgh: University of Pittsburgh Press, pp. 273–282.
- SKYRMS, B. (1993) P. French, T. Uehling, Jr., and H. Wettstein (eds.), *Midwest Studies in Philosophy*, vol. XVIII, University of Notre Dame Press, Notre Dame, pp. 78–89.
- SKYRMS, B. (1996) 'Bayesian Projectability' in *Grue!*, ed. Stalker, D., La Salle: Open Court.
- SOBER, E. (1998) 'Simplicity', *Routledge Encyclopedia of Philosophy*, Vol. 8, London: Routledge, pp. 780–3.
- SPIELMAN, S. (1977) 'Physical Probability and Bayesian Statistics', *Synthese* 36, pp. 235–69.
- SPINOZA, B. DE (2002) *Verhandeling over de Verbetering van het Verstand*, Groningen: Historische Uitgeverij.

- SPOHN, W. (1981) 'Analogy and Inductive Logic: a Note on Niiniluoto', *Erkenntnis* 21, pp. 35–52.
- SPOHN, W. (2002) 'Laws, *Ceteris Paribus* Conditions, and the Dynamics of Belief', *Erkenntnis* 57(3), pp. 373–94.
- STALKER, D. (1996) *Grue!*, La Salle: Open Court.
- STEGMÜLLER, W. (1973) *Carnap II: Normatieve Theorie des Inductiven Rasonierens*, part C (Volume IV), Berlin: Springer.
- STENNING, K. AND LAMBALGEN, M. VAN (2001) 'Semantics as a Foundation for Psychology: A Case Study of Wason's Selection Task', *Journal of Logic, Language and Information* 10, pp. 273–317.
- SUPPES, P. (1966) 'Concept Formation and Bayesian Decision' in *Aspects of Inductive Logic*, eds. Hintikka, J. and Suppes, P., Amsterdam: North Holland Publishers.
- SUPPES, P. (2002) *Representation and Invariance of Scientific Structures*, Stanford: CSLI Publications.
- TONG, S. AND KOLLER, D. (2001) 'Active Learning for Structure in Bayesian Network' in *Proceedings of the International Joint Conference on Artificial Intelligence*, San Francisco: Morgan Kaufman, pp. 863–69.
- TUOMELA, R. (1966) 'Induction in Ordered Universes' in *Aspects of Inductive Logic*, eds. Hintikka, J. and Suppes, P., Amsterdam: North Holland Publishers.
- TUOMELA, R. (1973) *Theoretical Concepts*, Wien: Springer.
- UFFINK, J. (1990) *Grondslagen van het Waarschijnlijkheidsbegrip*, manuscript.
- UFFINK, J. (1997) 'Can the maximum entropy principle be explained as a consistency requirement?', manuscript.
- VAN FRAASSEN, B. C. (1980) *The Scientific Image*, Oxford: Clarendon Press.
- VAN FRAASSEN, B. C. (1989) *Laws and Symmetry*, Oxford: Clarendon Press.
- VON MISES, R. (1928) *Probability, Statistics, and Truth*, London: Dover.
- VON MISES, R. (1964) *Mathematical Theory of Probability and Statistics*, New York: Academic Press.
- VON PLATO, J. (1981) 'On Partial Exchangeability as a Generalisation of Symmetry Principles' *Erkenntnis* 16, pp. 53–59.
- VON PLATO, J. (1994) *Creating Modern Probability*, Cambridge: Cambridge University Press.
- VON WRIGHT, G. H. (1957) *The Logical Problem of Induction*, Oxford: Blackwell.

- VOTSIS, I. (2005) 'The Upward Path to Structural Realism', *Philosophy of Science*, forthcoming.
- WASON, P. J. (1968) 'Reasoning about a Rule', *Quarterly Journal of Experimental Psychology* 20, pp. 273–281.
- WAGNER, K. (2002) 'Probability Kinematics and Commutativity', *Philosophy of Science* 69, pp. 266–78.
- WILLIAMS, P. M. (1976) 'Indeterminate Probabilities' in *Formal Methods in the Methodology of the Empirical Sciences*, Prezlecki, M., Szaniawski, K. and Wojcicki, R. (eds.), Dordrecht: Reidel.
- WILLIAMS, P. M. (1980) 'Bayesian Conditionalisation and the Principle of Minimum Information', *British Journal for the Philosophy of Science* 31, pp. 131–44.
- WILLIAMSON, J. (1999) 'Countable Additivity and Subjective Probability', *British Journal for the Philosophy of Science* 51(3), pp. 401–16.
- WILLIAMSON, J. (2003) "Bayesianism and Language Change", *Journal of Logic, Language and Information* 12(1), pp. 53–97.
- WORRALL, J. (1989) 'Structural Realism: The Best of Both Worlds?', *Dialectica* 43, pp. 99–124.
- ZABELL, S. (1982) 'W. E. Johnson's "Sufficientness" Postulate', *Annals of Statistics* 10(4), pp. 1091–99.
- ZABELL, S. (1989) 'The Rule of Succession', *Erkenntnis* 31, pp. 283–321.
- ZABELL, S. (2002) 'It All Adds Up: the Dynamic Coherence of Radical Probabilism', *Philosophy of Science* 69, pp. S98–S103.